

Claim 4, line 1, change "A modified" to --Modified--;  
lines 1-10, delete "capable of raising new ...  
TNF $\alpha$  B cell epitope" and substitute therefor --according to claim  
1--.

Claim 26, lines 3-4, delete ", preferably an  
immunologically ... HSP70 or interleukin".

Claim 27, lines 4-6, delete ", such as aluminium  
phosphate, ... dipeptide or iscom".

Claim 28, lines 3-7, delete "such as chronic inflammatory  
... osteoporosis and asthma".

Claim 31, lines 2-3, delete ", such as retroviral  
expression vector".

Claim 32, lines 2-3, delete ", e.g. subcutaneous,  
intramuscular or intradermal".

33. (Amended) The use of antibodies raised against a  
modified TNF $\alpha$  molecule by administering a vaccine as defined in  
[according to] claim 27[, preferably monoclonal antibodies] in a  
doagnostic test for TNF $\alpha$ .

34. (Amended) Diagnostic use of antibodies raised against a modified TNF $\alpha$  molecule as defined in claim 1 [according to claim 33].

35. (Amended) A method of testing human body fluids for the presence of TNF $\alpha$  which comprises contacting a composition containing antibodies raised against the modified TNF $\alpha$  according to claim 1 with a sample of human body fluid and determining whether said antibodies bind to TNF $\alpha$  in said sample.

D<sup>4</sup>  
36. (Amended) A [diagnostic] method for diagnosing TNF $\alpha$ -related diseases employing an in vitro immunoassay to detect TNF $\alpha$  in human body fluids by use of antibodies raised against a modified TNF $\alpha$  molecule as defined in claim 1.

Claim 37, lines 3-4, delete ",e.g. using avidin/biotin technology".

Claim 38, line 1, insert "--in human beings--" after "diseases";

lines 3-4, delete "an animal, including".

B<sup>5</sup>  
39. (Amended) A method for the use [Use] of a modified TNF $\alpha$  molecule according to claim 1, comprising preparing [for the preparation of] a medicament for the treatment or prevention of diseases the pathophysiology of which is at least partially due to TNF $\alpha$  release or activity from a modified TNF $\alpha$  molecule according to claim 1.

Add the following new claims:

-- 40. Modified human TNF $\alpha$  molecule according to claim 26, wherein the adjuvant molecule is an immunologically active adjuvant.

41. Modified human TNF $\alpha$  molecule according to claim 26, wherein the adjuvant molecule is GM-SCF, HSP70 or interleukin.

42. A vaccine according to claim 27, wherein the pharmaceutically acceptable adjuvant is aluminum phosphate, aluminum hydroxide, calcium phosphate, muramyl dipeptide or ~~iscon~~ <sup>immunostimulating complex</sup>.

43. A vaccine according to claim 28, <sup>wherein</sup> ~~wherein~~ the diseases <sup>is</sup> ~~are~~ chronic inflammatory diseases, cancer, disseminated sclerosis, diabetes, psoriasis, osteoporosis and asthma.

44. A vaccine according to claim 43, wherein the chronic inflammatory diseases <sup>is</sup> ~~are~~ rheumatoid arthritis, <sup>or</sup> ~~and~~ inflammatory bowel diseases.

45. A vaccine according to claim 44, wherein the inflammatory bowel diseases <sup>is</sup> ~~are~~ Crohn's disease, <sup>or</sup> ~~and~~ Colitis Ulcerosa.

46. A vaccine according to claim 31, wherein the viral expression vector is a retroviral expression vector.